

## Section 1. Registration Information

### Source Identification

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Facility Name:	IO Phoenix One, LLC
Parent Company #1 Name:	IO Data Centers, LLC
Parent Company #2 Name:	

### Submission and Acceptance

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Submission Type:	Re-submission
Subsequent RMP Submission Reason:	Voluntary update (not described by any of the above reasons)
Description:	
Receipt Date:	13-Jul-2009
Postmark Date:	10-Jul-2009
Next Due Date:	10-Jul-2014
Completeness Check Date:	14-Jul-2009
Complete RMP:	Yes
De-Registration / Closed Reason:	
De-Registration / Closed Reason Other Text:	
De-Registered / Closed Date:	
De-Registered / Closed Effective Date:	
Certification Received:	Yes

### Facility Identification

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EPA Facility Identifier:	1000 0019 2338
Other EPA Systems Facility ID:	

### Dun and Bradstreet Numbers (DUNS)

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Facility DUNS:	
Parent Company #1 DUNS:	
Parent Company #2 DUNS:	

### Facility Location Address

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Street 1:	615 North 48th Street
Street 2:	
City:	Phoenix
State:	ARIZONA
ZIP:	85008
ZIP4:	
County:	MARICOPA

### Facility Latitude and Longitude

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Latitude (decimal):	33.454167
Longitude (decimal):	-111.976667
Lat/Long Method:	Interpolation - Digital map source (TIGER)
Lat/Long Description:	Center of Facility
Horizontal Accuracy Measure:	100
Horizontal Reference Datum Name:	North American Datum of 1983
Source Map Scale Number:	

## Owner or Operator

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Operator Name:	IO Phoenix One, LLC
Operator Phone:	(480) 513-8500

## Mailing Address

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Operator Street 1:	615 North 48th Street
Operator Street 2:	
Operator City:	Phoenix
Operator State:	ARIZONA
Operator ZIP:	85008
Operator ZIP4:	
Operator Foreign State or Province:	
Operator Foreign ZIP:	
Operator Foreign Country:	

## Name and title of person or position responsible for Part 68 (RMP) Implementation

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RMP Name of Person:	Marvin Rowell Marvin Rowell
RMP Title of Person or Position:	Operations Manager
RMP E-mail Address:	mrowell@iodatacenters.com

## Emergency Contact

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Emergency Contact Name:	Marvin Rowell
Emergency Contact Title:	Operations Manager
Emergency Contact Phone:	(480) 208-3235
Emergency Contact 24-Hour Phone:	(888) 889-2627
Emergency Contact Ext. or PIN:	
Emergency Contact E-mail Address:	mrowell@iodatacenters.com

## Other Points of Contact

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Facility or Parent Company E-mail Address:	Jpfaff@iodatacenters.com
Facility Public Contact Phone:	(480) 513-8500
Facility or Parent Company WWW Homepage Address:	www.iodatacenters.com

## Local Emergency Planning Committee

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LEPC:	Maricopa County LEPC
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## Full Time Equivalent Employees

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Number of Full Time Employees (FTE) on Site:	30
FTE Claimed as CBI:	

## Covered By

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OSHA PSM :	Yes
EPCRA 302 :	Yes
CAA Title V:	

Air Operating Permit ID:

## OSHA Ranking

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OSHA Star or Merit Ranking:

## Last Safety Inspection

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Last Safety Inspection (By an External Agency) Date:	04-Jun-2005
Last Safety Inspection Performed By an External Agency:	Fire Department

## Predictive Filing

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Did this RMP involve predictive filing?:

## Preparer Information

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Preparer Name:	Tom Henry
Preparer Phone:	(757) 463-7497
Preparer Street 1:	544 Pheasant Run
Preparer Street 2:	
Preparer City:	Virginia Beach
Preparer State:	VIRGINIA
Preparer ZIP:	23452
Preparer ZIP4:	
Preparer Foreign State:	
Preparer Foreign Country:	
Preparer Foreign ZIP:	

## Confidential Business Information (CBI)

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CBI Claimed:  
Substantiation Provided:  
Unsanitized RMP Provided:

## Reportable Accidents

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Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.
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## Process Chemicals

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Process ID:	81076
Description:	Ammonia Refrigeration
Process Chemical ID:	107934
Program Level:	Program Level 3 process
Chemical Name:	Ammonia (anhydrous)
CAS Number:	7664-41-7
Quantity (lbs):	35250
CBI Claimed:	
Flammable/Toxic:	Toxic

## Process NAICS

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Process ID:	81076
Process NAICS ID:	83053
Program Level:	Program Level 3 process
NAICS Code:	541513
NAICS Description:	Computer Facilities Management Services

Section 2. Toxics: Worst Case

Toxic Worst ID: 52968

Percent Weight:	
Physical State:	Gas liquified by pressure
Model Used:	Areal Locations of Hazardous Atmospheres [ALOHA(R)]
Release Duration (mins):	10
Wind Speed (m/sec):	1.5
Atmospheric Stability Class:	F
Topography:	Urban

Passive Mitigation Considered

Dikes:	
Enclosures:	Yes
Berms:	
Drains:	
Sumps:	
Other Type:	

## Section 3. Toxics: Alternative Release

Toxic Alter ID: 62386

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Percent Weight:

Physical State:

Model Used:

Wind Speed (m/sec):

Atmospheric Stability Class:

Topography:

Gas liquified by pressure

Areal Locations of Hazardous Atmospheres  
[ALOHA(R)]

3.0

B

Urban

### Passive Mitigation Considered

Dikes:

Enclosures:

Berms:

Drains:

Sumps:

Other Type:

### Active Mitigation Considered

Sprinkler System:

Deluge System:

Water Curtain:

Neutralization:

Excess Flow Valve:

Flares:

Scrubbers:

Emergency Shutdown:

Other Type:

Yes

## Section 4. Flammables: Worst Case

No records found.

## **Section 5. Flammables: Alternative Release**

No records found.



## Section 6. Accident History

No records found.

## Section 7. Program Level 3

### Description

Ammonia refrigeration to provide temperature control for computer data systems to include Program 3 Prevention Program involved the development and implementation of the following: Process Safety Information (PSI), a Process Hazard Analysis (PHA), Standard Operating Procedures (SOP), Safework Practices, a Training Program, a Mechanical Integrity (Maintenance) Program, a Pre-Startup Safety Review (PSSR), an Employee Participation Program, a Hot Work Permit Procedure, a Management of Change Program, and a Contractor Safety Program.

### Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	69509
Chemical Name:	Ammonia (anhydrous)
Flammable/Toxic:	Toxic
CAS Number:	7664-41-7

Prevention Program Level 3 ID:	47591
NAICS Code:	541513

### Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	14-Apr-2009
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### Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	13-Apr-2009
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### The Technique Used

What If:	
Checklist:	
What If/Checklist:	Yes
HAZOP:	
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	13-Apr-2010

### Major Hazards Identified

Toxic Release:	Yes
Fire:	Yes
Explosion:	Yes
Runaway Reaction:	
Polymerization:	
Overpressurization:	Yes
Corrosion:	Yes
Overfilling:	Yes

Contamination:	Yes
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	Yes
Earthquake:	
Floods (Flood Plain):	
Tornado:	Yes
Hurricanes:	
Other Major Hazard Identified:	

## Process Controls in Use

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Vents:	Yes
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	
Flares:	
Manual Shutoffs:	Yes
Automatic Shutoffs:	Yes
Interlocks:	Yes
Alarms and Procedures:	Yes
Keyed Bypass:	
Emergency Air Supply:	Yes
Emergency Power:	
Backup Pump:	Yes
Grounding Equipment:	
Inhibitor Addition:	
Rupture Disks:	
Excess Flow Device:	
Quench System:	
Purge System:	Yes
None:	
Other Process Control in Use:	

## Mitigation Systems in Use

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Sprinkler System:	Yes
Dikes:	
Fire Walls:	
Blast Walls:	
Deluge System:	
Water Curtain:	
Enclosure:	Yes
Neutralization:	
None:	
Other Mitigation System in Use:	

## Monitoring/Detection Systems in Use

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Process Area Detectors:	
Perimeter Monitors:	
None:	Yes
Other Monitoring/Detection System in Use:	

## Changes Since Last PHA Update

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Reduction in Chemical Inventory:  
Increase in Chemical Inventory:  
Change Process Parameters:  
Installation of Process Controls:  
Installation of Process Detection Systems:  
Installation of Perimeter Monitoring Systems:  
Installation of Mitigation Systems:  
None Recommended:  
None: Yes  
Other Changes Since Last PHA or PHA Update:

## Review of Operating Procedures

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Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures): 14-Apr-2009

## Training

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Training Revision Date (The date of the most recent review or revision of training programs): 14-Apr-2009

## The Type of Training Provided

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Classroom: Yes  
On the Job:  
Other Training:

## The Type of Competency Testing Used

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Written Tests:  
Oral Tests:  
Demonstration:  
Observation: Yes  
Other Type of Competency Testing Used:

## Maintenance

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Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures): 14-Apr-2009

Equipment Inspection Date (The date of the most recent equipment inspection or test): 14-Apr-2009

Equipment Tested (Equipment most recently inspected or tested): Complete refrigeration system

## Management of Change

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Change Management Date (The date of the most recent change that triggered management of change procedures):

Change Management Revision Date (The date of the most recent review or revision of management of change procedures): 14-Apr-2009

## Pre-Startup Review

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Pre-Startup Review Date (The date of the most recent pre-startup review):

## Compliance Audits

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Compliance Audit Date (The date of the most recent compliance audit):

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):

## Incident Investigation

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Incident Investigation Date (The date of the most recent incident investigation (if any)):

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

## Employee Participation Plans

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Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans): 14-Apr-2009

## Hot Work Permit Procedures

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Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures): 14-Apr-2009

## Contractor Safety Procedures

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Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures): 14-Apr-2009

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):

## Confidential Business Information

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CBI Claimed:

## Section 8. Program Level 2

## Section 9. Emergency Response

### Written Emergency Response (ER) Plan

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Community Plan (Is facility included in written community emergency response plan?):

Facility Plan (Does facility have its own written emergency response plan?): Yes

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?): Yes

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?): Yes

Healthcare (Does facility's ER plan include information on emergency health care?): Yes

### Emergency Response Review

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Review Date (Date of most recent review or update of facility's ER plan): 14-Apr-2009

### Emergency Response Training

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Training Date (Date of most recent review or update of facility's employees): 14-Apr-2009

### Local Agency

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Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated): Maricopa County LEPC

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated): (602) 273-1411

### Subject to

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OSHA Regulations at 29 CFR 1910.38:  
OSHA Regulations at 29 CFR 1910.120: Yes  
Clean Water Regulations at 40 CFR 112:  
RCRA Regulations at CFR 264, 265, and 279.52:  
OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254:  
State EPCRA Rules or Laws: Yes  
Other (Specify):

## Executive Summary

### Executive Summary

This Executive Summary briefly describes the following elements:

- ¿ The accidental release prevention and emergency response policies at the stationary source.
- ¿ The stationary source and regulated substances handled.
- ¿ The worst-case release scenario(s) and the alternative release scenario(s), including administrative controls and mitigation measures to limit the distances for each reported scenario.
- ¿ The general accidental release prevention program and chemical-specific prevention steps.
- ¿ The five-year accident history.
- ¿ The emergency response program.
- ¿ Planned changes to improve safety.

#### 1. The accidental release prevention and emergency response policies at the stationary source

To address concerns of an accidental release, prevention and emergency response, all plant and field personnel are trained in ammonia emergency response procedures and use of appropriate protective equipment. Refresher training and emergency response drills are conducted on a periodic basis to ensure personnel are equipped, trained, prepared, and practiced in responding to ammonia emergencies.

As a result of information gathered during preparation of this Risk Management Program, IO Data Centers, Phoenix Facility is committing additional resources to further increase employee awareness and equipment reliability and to establish operator training and preventive maintenance programs. As a demonstration of IO Data Centers, Phoenix Facility's high degree of commitment to public safety and service, IO Data Centers, Phoenix Facility is taking action to decrease the risk of ammonia exposure to the public by implementing recommendations made during the Process Hazards Analysis and Off-site Consequence Analysis.

#### 2. The stationary source and regulated substances handled

Anhydrous ammonia is used as a refrigerant in the IO Data Centers, Phoenix Facility refrigeration system. The liquid is circulated as needed to the heat exchangers where heat is absorbed and removed from process system water. The anhydrous ammonia refrigeration system is a closed loop industrial refrigeration system. The ammonia is not used or mixed in any manner with other chemical processes.

#### 3. The worst-case release scenario(s) and the alternative release scenario(s), including administrative controls and mitigation measures to limit the distances for each reported scenario

A "Worst-Case Scenario Offsite Consequence Analysis" and an "Alternative Scenario Offsite Consequence Analysis" were performed identifying the public and environmental receptors within the toxic endpoint concentration radius of 200 ppm. The results are mitigated by the fact that all the vessels and the much of the piping are inside the IO Data Centers, Phoenix Facility building. A variety of administrative controls and computerized controls are in place to shut the system down when operating parameters and limits are exceeded.

#### 4. The general accidental release prevention program and chemical-specific preventative steps

The basic elements of the Program 3 Prevention program have been developed and are now in place. These include:



- ¿ Process Safety Information
- ¿ Process Hazard Analysis
- ¿ Standard Operating Procedures
- ¿ Safework Practices
- ¿ Employee and Operator Training Programs
- ¿ Mechanical Integrity Program
- ¿ Management of Change Procedures
- ¿ PSM Compliance Audit Procedures
- ¿ Incident Investigation Procedures
- ¿ Employee Participation Program
- ¿ Hot Work Permit Procedures
- ¿ Contractor Safety Program
- ¿ Emergency Response Program

Ammonia specific prevention steps include:

- ¿ Administrative controls
- ¿ Operator Training
- ¿ Computerized controls

The Preventive Program 3 provides extensive maintenance and operator/mechanic training to ensure that the system's mechanical integrity is maintained for the life of the covered process. Program 3 also incorporates administrative controls when modifications are made to the covered process (ammonia refrigeration system), so the training and preventative programs are updated as the system expands and changes.

#### 5. The five-year accident history

A five-year accident history has not been prepared and included in the RMP since there have been no reportable incidents within the last 5 years (new facility). To prevent and/or minimize any potential future release of anhydrous ammonia, IO Data Centers, Phoenix Facility is implementing a detailed Process Safety Management program (Preventive Program 3).

#### 6. The emergency response program

Emergency response is discussed in Section 5 of the RMP. IO Data Centers, Phoenix Facility has a detailed Emergency Response Plan (ERP) for their facility. The purpose of this plan is to provide the means for rapidly determining the appropriate response for any emergency that may develop at the facility such as an accidental release of anhydrous ammonia. IO Data Centers, Phoenix Facility conducts scheduled drills of the emergency response plan. The Emergency Response Program is written, includes specific actions to be taken in response to an accidental release, includes procedures for informing the public and local agencies responsible for responding to an accidental release, and includes information on emergency health care.

#### 7. Planned changes to improve safety

IO Data Centers, Phoenix Facility is incorporating and addressing any recommendations resulting from the Process Hazard Analysis, Offsite Consequences, and program audits. The flexibility of the program allows IO Data Centers, Phoenix Facility to respond effectively to prevent or minimize any potential exposure of IO Data Centers, Phoenix Facility employees, the surrounding public, and/or the environment to a release of anhydrous ammonia. Specific actions taken to improve safety are the implementation of the Program 3 Prevention Program described above, improved operator training, administrative controls, and computerized system controls.